Index of Authors and Papers

Abe, M., see T. Mukaihara 227 (1996) 400
Abstreiter, G., R. Strenz, G. Schedelbeck and E. Silveira, Electronic excitations in quantum wires and dots 227 (1996) 6
Ahmed, H., Single atom scale lithography for single electron devices 227 (1996) 259
Ajiki, H. and T. Ando, Carbon nanotubes: effects of magnetic fields on lattice distortions 227 (1996) 342
Akabori, M., see J. Motohisa 227 (1996) 295
Akiyama, H., see P.D. Wang 227 (1996) 378
Allen, S.J., U. Bhattacharya, K. Campman, H. Drexler, A. Gossard, B.J. Keay, K. Maranowski, G. Medeiros-Ribeiro, M. Rodwell, J.S. Scott, C. Unterrainer, M. Wanke and S. Zeuner, Photon assisted transport through semiconductor quantum structures in intense terahertz electric fields 227 (1996) 367
Allgair, J., see M.N. Kozicki 227 (1996) 318
Ando, T., see H. Ajiki 227 (1996) 342
Ando, T., see S. Uryu 227 (1996) 138
Ando, T., see T. Nakanishi 227 (1996) 127
Ando, T., see T. Suzuki 227 (1996) 46
Andoh, H. and M. Takai, Nanofabrication with a metal-covered scanning tunneling microscope tip 227 (1996) 276
Aoyagi, Y., see A. Kanda 227 (1996) 235
Aoyagi, Y., see J.P. Bird 227 (1996) 148
Aoyagi, Y., see M. Stopa 227 (1996) 61
Aoyagi, Y., see S. Nomura 227 (1996) 38
Aoyagi, Y., see Y. Ochiai 227 (1996) 152
Arakawa, Y., see M. Nishioka 227 (1996) 404
Arakawa, Y., see Y. Nagamune 227 (1996) 77
Arimoto, H., see K. Yamanaka 227 (1996) 356
Asada, M., see K. Mori 227 (1996) 213
Asada, M., see Y. Kohno 227 (1996) 216
Averin, D., Noise and adiabatic dynamics of superconducting quantum point contacts 227 (1996) 241

Baba, T., N. Kamizawa and M. Ikeda, Nanofabrication of GaInAsP/InP 2-dimensional photonic crystals by a methane-based reactive ion beam etching 227 (1996) 415
Babiker, S., see J.R. Barker 227 (1996) 87
Baldwin, K.W., see H.L. Stormer 227 (1996) 164
Band, Y.B., see G.W. Bryant 227 (1996) 390
Barker, J.R., S. Babiker and S. Roy, Single-electron transport in nanostructure systems 227 (1996) 87
Bauer, G., see A.A. Darhuber 227 (1996) 11
Bauer, G.E.W., see Y. Tanaka 227 (1996) 339
Berven, C., see J.C. Smith 227 (1996) 197
Bhattacharya, U., see S.J. Allen 227 (1996) 367
Bimberg, D., see H. Nakashima 227 (1996) 291
Bird, J.P., D.K. Ferry, G. Edwards, D.M. Olatona, R. Newbury, R.P. Taylor, K. Ishibashi, Y. Aoyagi, T. Sugano and Y. Ochiai, Transition from chaotic to regular quantum scattering in mesoscopic billiards with nominally regular geometry 227 (1996) 148
Bird, J.P., see Y. Ochiai 227 (1996) 152
Blick, R.H., see R.J. Haug 227 (1996) 82
Blom, F.A.P., see R.J.F. van Haren 227 (1996) 186
Böhm, G., see H. Nagasawa 227 (1996) 206
Böhm, G., see K. Fujii 227 (1996) 98
Bordone, P., see D. Vasileska 227 (1996) 333
Borghs, G., see S.G. den Hartog 227 (1996) 229
Bryant, G.W., P.S. Julienne and Y.B. Band, Exciton binding and delocalization in T-shaped quantum wires 227 (1996) 390

Campbell, P.M., E.S. Snow and P.J. McMarr, AFM-based fabrication of Si nanostructures 227 (1996) 315
Campbell, P.M., see E.S. Snow 227 (1996) 279
Campman, K., see S.J. Allen 227 (1996) 367
Chaplik, A.V., see L. Wendler 227 (1996) 397
Christen, J., see H. Nakashima 227 (1996) 291
Chun, Y.J., S. Nakajima, Y. Okada and M. Kawabe, The role of atomic hydrogen for formation of quantum dots by self-organizing process in MBE 227 (1996) 299
Cuniberti, G., M. Sassetti and B. Kramer, AC-conductance of one-dimensional, long-range correlated electrons 227 (1996) 256

de Lange, W., see R.J.F. van Haren 227 (1996) 186
den Hartog, S.G., C.M.A. Kapteyn, B.J. van Wees, T.M. Klapwijk, W. van Graaf and G. Borghs, Superconducting phase tuned sample-specific conductance fluctuations 227 (1996) 229
Darhuber, A.A., V. Holy, G. Bauer, P.D. Wang, Y.P. Song, C.M.S. Torres and M.C. Holland, Quantitative analysis of elastic strains in GaAs/AlAs quantum dots 227 (1996) 11
Di Carlo, A., see H. Nagasawa 227 (1996) 206
Dilger, M., see R.J. Haug 227 (1996) 82
Drexler, H., see S.J. Allen 227 (1996) 367
Du, R.R., see H.L. Stormer 227 (1996) 164

Eaves, L., see P.B. Wilkinson 227 (1996) 192
Eberl, K., see R.J. Haug 227 (1996) 82
Edwards, G., A. Grincwajg and D.K. Ferry, Classical and wave-mechanical aspects of magneto-transport fluctuations in ballistic quantum dots 227 (1996) 144

Edwards, G., see A. Grincwajg 227 (1996) 54
Edwards, G., see J.P. Bird 227 (1996) 148
Eldridge, T., see D. Vasileska 227 (1996) 333
Endo, A., see Y. Iye 227 (1996) 122
Engel, L.W., Y.P. Li and D.C. Tsui, Quantum Hall effect from finite-frequency studies 227 (1996) 173
Ershov, M., see V. Ryzhii 227 (1996) 17
Etienne, B., see A. Kumar 227 (1996) 161

Fafard, S., see P.D. Wang 227 (1996) 378
Ferry, D.K., see A. Grincwajg 227 (1996) 54
Ferry, D.K., see D. Vasileska 227 (1996) 333
Ferry, D.K., see D.P. Pivin. Jr. 227 (1996) 50
Ferry, D.K., see G. Edwards 227 (1996) 144
Ferry, D.K., see J.P. Bird 227 (1996) 148
Ferry, D.K., see M.N. Kozicki 227 (1996) 318
Ferry, D.K., see Y. Ochiai 227 (1996) 152
Fischer, P., see H. Nakashima 227 (1996) 291
Fomin, V.M., see L. Wendler 227 (1996) 397
Friedland, K.-J., Y. Hirayama, T. Fujisawa, T. Saku and S. Tarucha, Tunnelling and transfer between 1D and 2D electrons in adjusted quantum wells with thin barrier 227 (1996) 31
Friedland, K.-J., see J. Herfort 227 (1996) 170
Fromhold, T.M., see P.B. Wilkinson 227 (1996) 192
Fujii, K., W. Gödel, D.A. Wharam, S. Manus, J.P. Kotthaus, G. Böhm, W. Klein, G. Tränkle and G. Weimann, Microwave modulation of Coulomb-blockade oscillations in a quantum dot 227 (1996) 98
Fujii, K., see M. Yamaguchi 227 (1996) 387
Fujii, T., see T. Hiramoto 227 (1996) 95
Fujisawa, T., see K.-J. Friedland 227 (1996) 31
Fujiwara, A., see Y. Takahashi 227 (1996) 105
Fukui, T., see J. Motohisa 227 (1996) 295
Furuya, K., see F. Vázquez 227 (1996) 282
Furuya, K., see N. Kikegawa 227 (1996) 57
Furuya, K., see Y.C. Kang 227 (1996) 210
Futatsugi, T., N. Horiguchi, M. Saito and N. Yokoyama, Observation of single electron effects using HEMT 227 (1996) 109

Gamo, K., see F. Wakaya 227 (1996) 268
Gamo, K., see J. Herfort 227 (1996) 170
Gamo, K., see K. Tsukagoshi 227 (1996) 141
Ganitzer, P., see J. Oswald 227 (1996) 360
Gault, M., see Y.C. Kang 227 (1996) 210
Glattli, D.C., see A. Kumar 227 (1996) 161
Gödel, W., see K. Fujii 227 (1996) 98
Goodnick, S.M., see J.C. Smith 227 (1996) 197
Gornik, E., see G. Ploner 227 (1996) 24
Gossard, A., see S.J. Allen 227 (1996) 367
Goto, H., see M. Yamaguchi 227 (1996) 387
Govorov, A.O., see L. Wendler 227 (1996) 397
Grincwajg, A., G. Edwards and D.K. Ferry, Conductance fluctuations in quantum wire systems: A comparison between different scattering models 227 (1996) 54
Grincwajg, A., see G. Edwards 227 (1996) 144
Grundmann, M., see H. Nakashima 227 (1996) 291

Hamaguchi, C., see C. Wirner 227 (1996) 34
Hamaguchi, C., see H. Nagasawa 227 (1996) 206
Hamaguchi, C., see K. Yamanaka 227 (1996) 356
Hansen, W., see J.P. Kotthaus 227 (1996) 1
Hara, K., see N. Sawaki 227 (1996) 384
Hara, S., see J. Motohisa 227 (1996) 295
Haraguchi, K., see M. Miyao 227 (1996) 287
Hasegawa, H., see H. Tomozawa 227 (1996) 112
Hasegawa, H., see T. Hashizume 227 (1996) 42
Hashiguchi, G., see T. Hiramoto 227 (1996) 95
Hashizume, T., H. Okada, and H. Hasegawa, Quantum transport in a Schottky in-plane-gate controlled GaAs/AlGaAs quantum well wires 227 (1996) 42
Hashizume, T., see H. Tomozawa 227 (1996) 112
Hatori, N., see T. Mukaihara 227 (1996) 400
Haug, R.J., M. Dilger, T. Schmidt, R.H. Blick, K.v. Klitzing and K. Eberl, Single-electron transistors with quantum dots 227 (1996) 82
Hayashi, Y., see H. Tsuchiya 227 (1996) 411
He, S., see H.L. Stormer 227 (1996) 164
Heiblum, M., A. Yacoby and R. Schuster, Coherence and phase sensitive measurements with a quantum dot 227 (1996) 119
Heigl, G., see J. Oswald 227 (1996) 360
Herfort, J., Y. Takagaki, K.-J. Friedland, R. Hey, K. Ploog, J. Takahara and K. Gamo, Temperature dependence of the bend resistance of composite fermions in narrow cross junctions 227 (1996) 170
Hey, R., see J. Herfort 227 (1996) 170
Hirakawa, K., Y. Shimada and T. Ikoma, Supply-function dependent sequential resonant tunneling in semiconductor multiple quantum well diodes 227 (1996) 202
Hiramoto, T., H. Ishikuro, T. Fujii, T. Saraya, G. Hashiguchi and T. Ikoma, Characterization of precisely width-controlled Si quantum wires fabricated on SOI substrates 227 (1996) 95
Hirayama, Y., see K.-J. Friedland 227 (1996) 31
Hiruma, K., see M. Miyao 227 (1996) 287
Holland, M.C., see A. A. Darhuber 227 (1996) 11
Holy, V., see A.A. Darhuber 227 (1996) 11
Homer, A., see J. Oswald 227 (1996) 360
Horiguchi, N., see T. Futatsugi 227 (1996) 109
Horiguchi, S., Validity of effective mass theory for energy levels in Si quantum wires 227 (1996) 336
Horiguchi, S., see Y. Takahashi 227 (1996) 105
Hwang, S.W., T. Sakamoto and K. Nakamura, Observation of universal exponent in a high mobility two-dimensional electron system in the integer quantum Hall effect 227 (1996) 180

Ibrahim, I.S., see F.M. Peeters 227 (1996) 131
Iga, K., see T. Mukaihara 227 (1996) 400
Iizuka, T., see V. Ryzhii 227 (1996) 17
Ikeda, M., see T. Baba 227 (1996) 415
Ikedo, N., see M. Yamaguchi 227 (1996) 387
Ikehata, S. see Y. Shimazu 227 (1996) 102
Ikoma, T., see K. Hirawaka 227 (1996) 202

Ikoma, T., see T. Hiramoto 227 (1996) 95
Imanaka, Y., see K. Yamanaka 227 (1996) 356
Inoshita, T. and H. Sakaki, Electron–phonon interaction and the so-called phonon bottleneck effect in semiconductor quantum dots 227 (1996) 373
Inoue, K., see H. Nakashima 227 (1996) 291
Inoue, M., see S. Sasa 227 (1996) 363
Inoue, Y., see H. Nakashima 227 (1996) 291
Ishibashi, K., see A. Kanda 227 (1996) 235
Ishibashi, K., see J.P. Bird 227 (1996) 148
Ishibashi, K., see Y. Ochiai 227 (1996) 152
Ishida, M., see S. Yanagiya 227 (1996) 326
Ishihara, T., see A. Nagami 227 (1996) 346
Ishikuro, H., see T. Hiramoto 227 (1996) 95
Ishizaki, J. see J. Motohisa 227 (1996) 295
Ismail, K., Electron transport in the quantum Hall regime in strained Si/SiGe 227 (1996) 310
Isshiki, H., see S. Nomura 227 (1996) 38
Itoh, M., see M. Ogawa 227 (1996) 65
Iwabuchi, S., Coulomb blockade and incoherent Cooper pair tunneling in ultrasmall Josephson double junctions with external circuits 227 (1996) 245
Iye, Y., A. Endo, S. Izawa, M. Kato and S. Katsumoto, Magnetotransport in modulated and magnetic fields 227 (1996) 122
Izawa, S., see Y. Iye 227 (1996) 122
Izumiya, S., see S. Sasa 227 (1996) 363

Jenkins-Gray, A., see M.N. Kozicki 227 (1996) 318
Jin, Y., see A. Kumar 227 (1996) 161
Jinushi, K., see H. Tomozawa 227 (1996) 112
Jones, G.A.C., P.D. Rose, E.H. Linfield and D.A. Ritchie, GaAs/AlGaAs device fabrication using MBE growth and in situ focused ion beam lithography 227 (1996) 264
Julienne, P.S., see G.W. Bryant 227 (1996) 390

Kamizawa, N., see T. Baba 227 (1996) 415
Kanda, A. and S. Kobayashi, Effect of self-capacitance on charge Kosterlitz–Thouless transition in two-dimensional arrays of small tunnel junctions 227 (1996) 238
Kanda, A., K. Ishibashi, Y. Aoyagi and T. Sugano, Transport properties of superconducting SET transistor with a loop 227 (1996) 235
Kaneshiro, C. and T. Okumura, Fabrication of mesoscopic structures on n-GaAs surfaces by electrochemical scanning electron microscope 227 (1996) 271
Kang, W., see H.L. Stormer 227 (1996) 164
Kang, Y.C., M. Suhara, K. Furuya, M. Gault and R. Takemura, Undoped spacer layer effects on the evaluation of the coherent length in GaInAs/InP resonant tunneling diodes 227 (1996) 210
Kapteyn, C.M.A., see S.G. den Hartog 227 (1996) 229
Katayama S. and T. Tsuchiya, Light emission of quantum-well-exciton polaritons in single quantum wells 227 (1996) 393
Kato, M., see Y. Iye 227 (1996) 122
Katsumoto, S., see Y. Iye 227 (1996) 122
Katsuyama, T., see M. Miyao 227 (1996) 287
Kawabata, A., Temperature dependence of conductivity in multi-subband quantum wires 227 (1996) 249
Kawabe, M., see Y.J. Chun 227 (1996) 299
Kawaguchi, Y., S. Komiyama, T. Osada and Y. Shiraki, Nonlocal nature of the breakdown of the integer quantum Hall effects 227 (1996) 183
Kawamura, K., see F. Yamaguchi 227 (1996) 116
Kawasaki, K., see K. Tsutsui 227 (1996) 303
Kawasaki, M., see H. Koinuma 227 (1996) 323
Kazawa, H., see R. Yagi 227 (1996) 232
Keay, B.J., see S.J. Allen 227 (1996) 367
Khmyrova, I., see V. Ryzhii 227 (1996) 17
Kidokoro, T., see N. Sawaki 227 (1996) 384
Kikegawa, N. and K. Furuya, Scattering reduction due to electron wave interference by periodic doping of impurity ions in semiconductors 227 (1996) 57
Kitamura, M., see M. Nishioka 227 (1996) 404
Klapwijk, T.M., see S.G. den Hartog 227 (1996) 229
Klein, W., see K. Fujii 227 (1996) 98
Klitzing, K.v., see R.J. Haug 227 (1996) 82
Kobayashi, D., see F. Vázquez 227 (1996) 282
Kobayashi, S., see A. Kanda 227 (1996) 238
Kobayashi, S., see R. Yagi 227 (1996) 232
Kobayashi, S., see Y. Ootuka 227 (1996) 307
Kobayashi, S., see Y. Shimazu 227 (1996) 102
Kohno, Y. and M. Asada, Theoretical base current in metal/insulator resonant tunneling transistors based on electron wave scattered by base port structure 227 (1996) 216
Kohno, Y., see K. Mori 227 (1996) 213
Koinuma, H., T. Ohnishi, T. Maeda, M.B Lee, M. Kawasaki and M. Yoshimoto, Fabrication of atomically defined oxide films on Si by laser molecular beam epitaxy 227 (1996) 323
Komiyama, S., see Y. Kawaguchi 227 (1996) 183
Kop'ev, P.S., see P.D. Wang 227 (1996) 378
Kotera, N., Y. Shimamoto, T. Mishima and N. Miura, Study of cyclotron resonance in very high magnetic fields and nonparabolic energy band in InGaAs/InAlAs quantum wells 227 (1996) 349
Kotthaus, J.P., W. Hansen and D.A. Wharam, Electronic interactions between quantum dots 227 (1996) 1
Kotthaus, J.P., see K. Fujii 227 (1996) 98
Koyama, F., see T. Mukaihara 227 (1996) 400
Kozicki, M.N., J. Allgair, A. Jenkins-Gray, D.K. Ferry and T.K. Whidden, The use of electron beam exposure and chemically enhanced vapor etching of SiO_2 for nanoscale fabrication 227 (1996) 318
Kramer, B., see G. Cuniberti 227 (1996) 256
Kukimoto, H., see K. Uchida 227 (1996) 352
Kumar, A., L. Saminadayar, D.C. Glattli, Y. Jin and B. Etienne, Measurement of reduced shot noise in a quantum point contact 227 (1996) 161

Landauer, R., Mesoscopic noise: Common sense view 227 (1996) 156

Ledentsov, N.N., see P.D. Wang 227 (1996) 378
Lee, M.B., see H. Koinuma 227 (1996) 323
Leon, R., see P.D. Wang 227 (1996) 378
Leonard, D., see P.D. Wang 227 (1996) 378
Li, Y.P., see L.W. Engel 227 (1996) 173
Linfield, E.H., see G.A.C. Jones 227 (1996) 264
Lu, J.P. and M. Shayegan, Ballistic transport in the upper subband of a two-dimensional electron system 227 (1996) 69

Maeda, T., see H. Koinuma 227 (1996) 323
Manus, S., see K. Fujii 227 (1996) 98
Maranowski, K., see S.J. Allen 227 (1996) 367
Masukawa, K., see M. Yamaguchi 227 (1996) 387
Matsubara, T., see F. Wakaya 227 (1996) 268
Matsumoto, K., Room temperature operated single electron transistor made by STM/AFM nano-oxidation process 227 (1996) 92
Matsutani, A., see T. Mukaihara 227 (1996) 400
Matulis, A., see F.M. Peeters 227 (1996) 131
Maude, D.K., see J. Oswald 227 (1996) 360
McMarr, P.J., see P.M. Campbell 227 (1996) 315
Medeiros-Ribeiro, G., see P.D. Wang 227 (1996) 378
Medeiros-Ribeiro, G., see S.J. Allen 227 (1996) 367
Merz, J.L., see P.D. Wang 227 (1996) 378
Mishima, T., see N. Kotera 227 (1996) 349
Miura, N., see K. Yamanaka 227 (1996) 356
Miura, N., see K. Uchida 227 (1996) 352
Miura, N., see N. Kotera 227 (1996) 349
Miura, N., see P.B. Wilkinson 227 (1996) 192
Miura, N., see P.D. Wang 227 (1996) 378
Miyao, M., K. Hiruma, K. Haraguchi, T. Katsuyama and T. Nishino, Advanced self-organized epitaxy for GaAs quantum wire arrays 227 (1996) 287
Miyoshi, T., see H. Tsuchiya 227 (1996) 411
Miyoshi, T., see M. Ogawa 227 (1996) 65
Miyoshi, T., see Y. Okawa 227 (1996) 330
Mizutani, A., see T. Mukaihara 227 (1996) 400
Momose, H., see C. Wirner 227 (1996) 34
Momose, H., see K. Yamanaka 227 (1996) 356
Mooij, J.E., Quantum effect in mesoscopic systems of metallic tunnel junctions 227 (1996) 220
Mori, K., W. Saitoh, T. Suemasu, Y. Kohno, M. Watanabe and M. Asada, Room-temperature observation of multiple negative differential resistance in a metal ($CoSi_2$)/insulator (CaF_2) quantum interference transistor structure 227 (1996) 213
Mori, N., see K. Yamanaka 227 (1996) 356
Morifuji, M., see H. Nagasawa 227 (1996) 206
Motohisa, J., M. Akabori, S. Hara, J. Ishizaki, K. Ohkuri and T. Fukui, Theoretical and experimental investigation of an electron interference device using multiatomic steps on vicinal GaAs surfaces 227 (1996) 295
Mukaihara, T., N. Hatori, N. Ohnoki, A. Mizutani, M. Abe, A. Matsutani, F. Koyama and K. Iga, Fabrication processes for low threshold InGaAs vertical-cavity surface-emitting lasers 227 (1996) 400
Murase, K., see F. Wakaya 227 (1996) 268
Murase, K., see K. Oto 227 (1996) 189
Murase, K., see K. Tsukagoshi 227 (1996) 141
Murase, K., see Y. Takahashi 227 (1996) 105
Murayama, K., see H. Nagasawa 227 (1996) 206

Nagami, A., K. Okamura and T. Ishihara, Optical properties of a quantum wire crystal, $C_5H_{10}NH_2PbI_3$ 227 (1996) 346
Nagamune, Y., T. Noda, H. Watabe, Y. Ohno, H. Sakaki and Y. Arakawa, Photoluminescence from point contact structures – Direct observation of electron flow 227 (1996) 77
Nagasawa, H., K. Murayama, M. Morifuji, A. Di Carlo, P. Vogl, G. Böhm, G. Tränkle, G. Weimann and C. Hamaguchi, Stark-ladder transition in a $(GaAs)_5/(AlAs)_2$ Zener tunneling diode 227 (1996) 206
Nakajima, S., see Y.J. Chun 227 (1996) 299
Nakamura, K., see S.W. Hwang 227 (1996) 180
Nakamura, K., see T. Sakamoto 227 (1996) 74
Nakamura, Y., see T. Sakamoto 227 (1996) 74
Nakanishi, T. and T. Ando, AAS oscillations in antidot lattices 227 (1996) 127
Nakashima, H., M. Takeuchi, K. Inoue, T. Takeuchi, Y. Inoue, P. Fischer, J. Christen, M. Grundmann and D. Bimberg, Size-dependent luminescence of GaAs quantum wires on vicinal GaAs (1 1 0) surfaces with giant steps formed by MBE 227 (1996) 291
Nakayama, H., see F. Wakaya 227 (1996) 268
Newbury, R,, see J.p. Bird 227 (1996) 148
Nishino, T., see M. Miyao 227 (1996) 287
Nishioka, M., R. Schur, M. Kitamura, H. Watabe and Y. Arakawa, Light emission from vertical-microcavity quantum dot laser structures 227 (1996) 404
Noda, T., see Y. Nagamune 227 (1996) 77
Nomura, S., H. Isshiki, Y. Aoyagi and T. Sugano, Magnetic field effects in p-type modulation-doped GaAs quantum wires 227 (1996) 38

Ochiai, Y., K. Yamamoto, K. Ishibashi, J.P. Bird, Y. Aoyagi, T. Sugano and D.K. Ferry, Experimental evidence for boundary and impurity scattering related crossover in quasi-ballistic wires 227 (1996) 152
Ochiai, Y., see J.P. Bird 227 (1996) 148
Oestreich, M., see P.D. Wang 227 (1996) 378
Ogata, M., Quantized conductance in a mesoscopic Tomonaga–Luttinger liquid 227 (1996) 252
Ogawa, M., M. Itoh and T. Miyoshi, Analysis of valence-subband structures in a quantum wire with an arbitrary cross-section 227 (1996) 65
Ohkuri, K., see J. Motohisa 227 (1996) 295
Ohnishi, T., see H. Koinuma 227 (1996) 323
Ohno, Y., see Y. Nagamune 227 (1996) 77
Ohnoki, N., see T. Mukaihara 227 (1996) 400
Ohsaki, S., see N. Sawaki 227 (1996) 384
Okada, H., see H. Tomozawa 227 (1996) 112
Okada, H., see T. Hashizume 227 (1996) 42
Okada, Y., see Y.J. Chun 227 (1996) 299
Okamura, K., see A. Nagami 227 (1996) 346

Okawa, Y., H. Tsuchiya and T. Miyoshi, Guided modes in an arbitrarily oriented Si-quantum wire and their control 227 (1996) 330
Okumura, T., see C. Kaneshiro 227 (1996) 271
Olatona, D.M., see J.P. Bird 227 (1996) 148
Ono, K., see Y. Ootuka 227 (1996) 307
Ootuka, Y., K. Ono, H. Shimada and S. Kobayashi, A new fabrication method of ultra small tunnel junctions 227 (1996) 307
Osada, T., see Y. Kawaguchi 227 (1996) 183
Oswald, J., G. Heigl, G. Span, A. Homer, P. Ganitzer, D.K. Maude and J.C. Portal, Conductance fluctuations in PbTe wide parabolic quantum wells 227 (1996) 360
Oto, K., S. Takaoka and K. Murase, Bulk conductivity at quantum Hall plateaux by magnetocapacitance measurement 227 (1996) 189

Peeters, F.M., A. Matulis and I.S. Ibrahim, Two-dimensional electrons in modulated magnetic fields 227 (1996) 131
Petroff, P.M., see P.D. Wang 227 (1996) 378
Pfeiffer, L.N., see H.L. Stormer 227 (1996) 164
Pivin. Jr, D.P. and D.K. Ferry, Mesoscopic transport properties of in-plane gate defined quantum wires 227 (1996) 50
Ploner, G., J. Smoliner, G. Strasser and E. Gornik, Temperature-dependent magnetotransport properties for systems of few quantum wires 227 (1996) 24
Ploog, K., see J. Herfort 227 (1996) 170
Portal, J.C., see J. Oswald 227 (1996) 360

Rejaei, B., see Y. Tanaka 227 (1996) 339
Ritchie, D.A., see G.A.C. Jones 227 (1996) 264
Rodwell, M., see S.J. Allen 227 (1996) 367
Rose, P.D. see G.A.C. Jones 227 (1996) 264
Roy, S., see J.R. Barker 227 (1996) 87
Ryzhii, M., see V. Ryzhii 227 (1996) 17
Ryzhii, V., M. Ershov, I. Khmyrova, M. Ryzhii and T. Iizuka, Multiple quantum-dot infrared phototransistors 227 (1996) 17

Saito, M., see T. Futatsugi 227 (1996) 109
Saitoh, W., see K. Mori 227 (1996) 213
Sakaki, H., see P.D. Wang 227 (1996) 378
Sakaki, H., see T. Inoshita 227 (1996) 373
Sakaki, H., see Y. Nagamune 227 (1996) 77
Sakamoto, T., Y. Nakamura and K. Nakamura, Spatial and energy distributions of single-carrier traps in GaAs/Al_xGa_{1-x} As heterostructures 227 (1996) 74
Sakamoto, T., see S.W. Hwang 227 (1996) 180
Saku, T., see K.-J. Friedland 227 (1996) 31
Saminadayar, L., see A. Kumar 227 (1996) 161
Saraya, T., see T. Hiramoto 227 (1996) 95
Sasa, S., T. Sugihara, K. Tada, S. Izumiya, Y. Yamamoto and M. Inoue, High field transport properties of InAs/AlGaSb quantum wires 227 (1996) 363
Sassetti, M., see G. Cuniberti 227 (1996) 256
Sawaki, N., T. Kidokoro, S. Ohsaki, T. Suzuki and K. Hara, Resonance of electronic states and indirect excitons in an asymmetric triple quantum well structure 227 (1996) 384
Sawaki, N., see M. Yamaguchi 227 (1996) 387
Schedelbeck, G., see G. Abstreiter 227 (1996) 6
Schmidt, T., see R.J. Haug 227 (1996) 82
Schur, R., see M. Nishioka 227 (1996) 404
Schuster, R., see M. Heiblum 227 (1996) 119
Scott, J.S., see S.J. Allen 227 (1996) 367
Shayegan, M., see J.P. Lu 227 (1996) 69
Sheard, F.W., see P.B. Wilkinson 227 (1996) 192
Shimada, H., see Y. Ootuka 227 (1996) 307
Shimada, Y., see K. Hirakawa 227 (1996) 202
Shimamoto, Y., see K. Yamanaka 227 (1996) 356
Shimamoto, Y., see N. Kotera 227 (1996) 349
Shimazu, Y., S. Ikehata and S. Kobayashi, Dependence of Coulomb blockade in ultrasmall single tunnel junctions on tunnel resistance 227 (1996) 102
Shiraki, Y., see Y. Kawaguchi 227 (1996) 183
Silveira, E., see G. Abstreiter 227 (1996) 6
Smith, J.C., C. Berven, S.M. Goodnick and M.N. Wybourne, Nonequilibrium random telegraph switching in quantum point contacts 227 (1996) 197
Smoliner, J., see G. Ploner 227 (1996) 24
Snow, E.S. and P.M. Campbell, AFM fabrication of metal-oxide devices with in situ control of electrical properties 227 (1996) 279
Snow, E.S., see P.M. Campbell 227 (1996) 315
Song, Y.P., see A.A. Darhuber 227 (1996) 11
Span, G., see J. Oswald 227 (1996) 360
Stopa, M. and Y. Aoyagi, Effect of donor layer ordering on the formation of single mode quantum wires 227 (1996) 61
Stormer, H.L., W. Kang, S. He, R.R. Du, A.S. Yeh, D.C. Tsui, L.N. Pfeiffer, K.W. Baldwin and K.W. West, Composite Fermions: Their scattering and their spin 227 (1996) 164
Strasser, G., see G. Ploner 227 (1996) 24
Strenz, R., see G. Abstreiter 227 (1996) 6
Suemasu, T., see K. Mori 227 (1996) 213
Sugano T., see A. Kanda 227 (1996) 235
Sugano, T., see J.P. Bird 227 (1996) 148
Sugano, T., see S. Nomura 227 (1996) 38
Sugano, T., see Y. Ochiai 227 (1996) 152
Sugihara, T., see S. Sasa 227 (1996) 363
Suhara, M., see Y.C. Kang 227 (1996) 210
Suzuki, T. and T. Ando, Self-consistent results in quantum wires in magnetic fields: Temperature effects 227 (1996) 46
Suzuki, T., see N. Sawaki 227 (1996) 384

Tada, K., see S. Sasa 227 (1996) 363
Takagaki, Y., see J. Herfort 227 (1996) 170
Takahara, J., see J. Herfort 227 (1996) 170
Takahashi, I. and K. Ujihara, Quantum mechanical description of spontaneous emission in a microcavity in terms of admittance 227 (1996) 407

Takahashi, Y., S. Horiguchi, A. Fujiwara and K. Murase, Co-tunneling current in very small Si single-electron transistors 227 (1996) 105
Takai, M., see H. Andoh 227 (1996) 276
Takamasu, T., see P.B. Wilkinson 227 (1996) 192
Takaoka, S., see F. Wakaya 227 (1996) 268
Takaoka, S., see K. Oto 227 (1996) 189
Takaoka, S., see K. Tsukagoshi 227 (1996) 141
Takayanagi, H., Andreev reflection and quantum transport in an S–N–S junction 227 (1996) 224
Takemura, R., see Y.C. Kang 227 (1996) 210
Takeuchi, M., see H. Nakashima 227 (1996) 291
Takeuchi, T., see H. Nakashima 227 (1996) 291
Tamura, H. and M. Ueda, Effects of disorder and electron–electron interactions on orbital magnetism in quantum dots 227 (1996) 21
Tanaka, Y., M.I. Visscher, B. Rejaei and G.E.W. Bauer, Theory of tunneling conductance of CDW junctions 227 (1996) 339
Tarucha, S., see K.-J. Friedland 227 (1996) 31
Taylor, R.P., see J.P. Bird 227 (1996) 148
Tomozawa, H., K. Jinushi, H. Okada, T. Hashizume and H. Hasegawa, Design and fabrication of GaAs/AlGaAs single electron transistors based on in-plane Schottky gate control of 2DEG 227 (1996) 112
Torres, C.M.S., see A. A. Darhuber 227 (1996) 11
Torres, C.M.S., see P.D. Wang 227 (1996) 378
Tränkle, G., see H. Nagasawa 227 (1996) 206
Tränkle, G., see K. Fujii 227 (1996) 98
Tsuchiya, H., Y. Hayashi and T. Miyoshi, Spatially uniuniform gain in MQW lasers caused by nonequilibrium carrier transport 227 (1996) 411
Tsuchiya, H., see Y. Okawa 227 (1996) 330
Tsuchiya, T., see S. Katayama 227 (1996) 393
Tsui, D.C., see H.L. Stormer 227 (1996) 164
Tsui, D.C., see L.W. Engel 227 (1996) 173
Tsukagoshi, K., S. Takaoka, K. Murase and K. Gamo, Mechanism of commensurability oscillations in anisotropic antidot lattice 227 (1996) 141
Tsutsui, K., K. Uejima and K. Kawasaki, Site control of metal dot structures on fluoride surface by electron beam exposure 227 (1996) 303

Uchida, K., N. Miura and H. Kukimoto, Magneto-photoluminescence spectra of excitons in GaP/AlP short period superlattices in high magnetic fields 227 (1996) 352
Uchida, K., see P.D. Wang 227 (1996) 378
Ueda, M., see H. Tamura 227 (1996) 21
Uejima, K., see K. Tsutsui 227 (1996) 303
Ujihara, K., see I. Takahashi 227 (1996) 407
Unterrainer, C., see S.J. Allen 227 (1996) 367
Uryu, S. and T. Ando, Analysis of antidot lattices with periodic orbit theory 227 (1996) 138
Ustinov, V.M., see P.D. Wang 227 (1996) 378

van Graaf, W., see S.G. den Hartog 227 (1996) 229
van Haren, R.J.F., W. de Lange, F.A.P. Blom and J.H. Wolter, Imaging of edge channels in the integer quantum Hall regime by the lateral photoelectric effect 227 (1996) 186
van Wees, B.J., see S.G. den Hartog 227 (1996) 229
Vasileska, D., P. Bordone, T. Eldridge and D.K. Ferry, Quantum transport calculations for silicon inversion layers in MOS structures 227 (1996) 333
Vázquez, F., K. Furuya and D. Kobayashi, Possibility of hot electron detection with a scanning probe microscope 227 (1996) 282
Visscher, M.I., see Y. Tanaka 227 (1996) 339
Vogl, P., see H. Nagasawa 227 (1996) 206

Wado, H., see S. Yanagiya 227 (1996) 326
Wakaya, F., T. Matsubara, H. Nakayama, J. Yanagisawa, Y. Yuba, S. Takaoka, K. Murase and K. Gamo, Effects of growth interruption and FIB implantation in the UHV total vacuum process for the buried mesoscopic structures 227 (1996) 268
Wang, P.D., J.L. Merz, S. Fafard, R. Leon, D. Leonard, G. Medeiros-Ribeiro, M. Oestreich, P.M. Petroff, N.N. Ledentsov, P.S. Kop'ev, V.M. Ustinov, K. Uchida, N. Miura, H. Akiyama, H. Sakaki and C.M.S. Torres, Magneto-optical properties of InAs monolayers and $In_yAl_{1-y}As$ self-assembled quantum dots in Ga(Al)As matrices 227 (1996) 378
Wang, P.D., see A.A. Darhuber 227 (1996) 11
Wanke, M., see S.J. Allen 227 (1996) 367
Watabe, H., see M. Nishioka 227 (1996) 404
Watabe, H., see Y. Nagamune 227 (1996) 77
Watanabe, M., see K. Mori 227 (1996) 213
Weimann, G., see H. Nagasawa 227 (1996) 206
Weimann, G., see K. Fujii 227 (1996) 98
Wendler, L., V.M. Fomin, A.V. Chaplik and A.O. Govorov, Physical properties of few electron mesoscopic rings: Persistent currents, optical absorption and Raman scattering 227 (1996) 397
West, K.W., see H.L. Stormer 227 (1996) 164
Wharam, D.A., see J.P. Kotthaus 227 (1996) 1
Wharam, D.A., see K. Fujii 227 (1996) 98
Whidden, T.K., see M.N. Kozicki 227 (1996) 318
Wilkinson, P.B., T.M. Fromhold, L. Eaves, F.W. Sheard, N. Miura and T. Takamasu, Distribution of 'scarred' eigenfunctions in a quantum well with chaotic classical dynamics probed by resonant tunnelling 227 (1996) 192
Wirner, C., H. Momose and C. Hamaguchi, Mobility enhanced 1DEG electron transport in side gated quantum wire structures 227 (1996) 34
Wolter, J.H., see R.J.F. van Haren 227 (1996) 186
Wybourne, M.N., see J.C. Smith 227 (1996) 197

Yacoby, A., see M. Heiblum 227 (1996) 119
Yagi, R., T. Yamaguchi, H. Kazawa and S. Kobayashi, Capacitance dependence of critical tunneling resistance for superconductor–insulator transition in two-dimensional network of Josephson junctions 227 (1996) 232

Yamaguchi, F., K. Kawamura, Suppression of current noise due to the Coulomb correlation 227 (1996) 116
Yamaguchi, M., K. Masukawa, N. Ikedo, N. Sawaki, K. Fujii and H. Goto, Tunneling and interference of electronic states in double quantum well 227 (1996) 387
Yamaguchi, T., see R. Yagi 227 (1996) 232
Yamamoto, K., see Y. Ochiai 227 (1996) 152
Yamamoto, Y., see S. Sasa 227 (1996) 363
Yamanaka, K., H. Momose, N. Mori, C. Hamaguchi, H. Arimoto, Y. Imanaka, Y. Shimamoto and N. Miura, Angular dependent cylcotron resonance in short period $(GaAs)_n/(AlAs)_n$ superlattices 227 (1996) 356
Yanagisawa, J., see F. Wakaya 227 (1996) 268
Yanagiya, S., H. Wado, M. Yoshimoto and M. Ishida, A novel fabrication method of Si mesoscopic structures on Al_2O_3 by selective epitaxial growth using electron beam irradiation 227 (1996) 326
Yeh, A.S., see H.L. Stormer 227 (1996) 164
Yokoyama, N., see T. Futatsugi 227 (1996) 109
Yoshimoto, M., see H. Koinuma 227 (1996) 323
Yoshimoto, M., see S. Yanagiya 227 (1996) 326
Yuba, Y., see F. Wakaya 227 (1996) 268

Zeuner, S., see S.J. Allen 227 (1996) 367

Subject Index

2DEG 69, 131, 224, 264

AAS oscillations 127
AC conductance 256
Admittance 407
AFM 92
Aharonov–Bohm effect 127
AlGaAs/GaAs heterostructure 34
Andreev reflection 224
Anodic oxidation 279, 315
Antidot lattices 127, 138
Atomic force microscope 279, 315
Atomic hydrogen 299

Ballistic transport 69, 141, 161
Ballistics 54, 144
Band mixing effect 65
Base current 216
Binding energy 390
Breakdown 183

CaF_2 213, 303
Carbon nanotube 342
Cathodoluminescence 291
CDW junctions 339
CeO_2 323
Chaotic dynamics 192
Circuits 87
$CoSi_2$ 213
Co-tunneling 105
Coherence 119
Coherent length 210
Composite fermions 164, 170
Conductance fluctuations 360
Conductance quantization 252
Conduction electrons 349
Conductivity 189
Correlated systems 164
Correlation field 152
Coulomb blockade 1, 95, 98, 102, 109, 245, 259
Coulomb correlation 116
Coulomb interaction 249
Critical current 224
Current noise 116
Cyclotron resonance 349, 356

Dark current 17
Device-length dependence 183
Disorder 54
Donor layer ordering 61
Double subband system 69

Edge channels 186, 360
Edge states 46
Effective mass 336, 349
Effective width 50
Electrical transport 144
Electron beam 303, 318
Electron coupling 31
Electron flow 77
Electron interference 148, 295
Electron states 356
Electron transport 34, 310
Electron–electron interaction 21, 330
Electron–phonon interaction 373
Electron–wave interference 57
Electronic excitations 6
Electronic interactions 1
Electroreflectance 206
Exciton–polariton 393
Excitons 346, 352, 390

Finite frequencies 173
Finite-element method 65
Finite-state machine 87
First-principles calculation 336
Fluxoid quantization 235
Focused ion beam 31, 264, 268
Fractional quantum Hall effect 164
Fullerene tube 342

GaAs quantum wires 287, 291
GaAs surfaces 271
GaAs/AlAs 356
GaAs/AlGaAs 112, 141
GaInAsP/InP 415
GaP/AlP 352
Galvanomagnetic effects 180
Growth interruption 268

Heisenberg uncertainty 220
HEMT 109
Heteroepitaxy 323
Heterojunctions 180
Heterostructures 202
High field transport 363
High magnetic fields 164, 352
Hot electrons 210, 282

Imaging 186
Impurity scattering reduction 57
InAlAs/AlGaAs 378
InAs/AlGaSb 363
InAs/GaAs 378
InGaAs 400
InGaAs/AlGaAs 400
In(Ga)As quantum dots 299
In-plane gates 50, 112
In-situ processes 31
Indirect excitons 384
Inelastic light scattering 6
Infrared phototransistors 17
Integer quantum Hall effect 183
Intense fields 367
Interference 387
Interferometers 229
Inversion layers 333

Josephson junctions 224, 241, 245

Kinetic probe 156
Kosterlitz–Thouless transition 232, 238

Landau level 46, 342
Laser molecular beam epitaxy 323
Lasers 373, 400
Lateral surface superlattice 295
Lithography 259
Little–Parks oscillation 235
Localization 346
Low-dimensional structures 31, 170
Luminescence 393
Luttinger liquid 256

Magnetic field effect 38
Magnetic fields 122, 131
Magneto-photoluminescence 352
Magnetocapacitance 189
Magnetoresistance 138
Magnetotransport 24, 122
MBE 264
Metal-covered tip 276
Meta–insulator heterostructures 213, 216
Microcavities 404, 407
Microfabrication 307
Microwaves 98
Mobility enhancement 57
MOCVD 404
Modulated fields 122, 131
Modulation doping 38
Molecular beam epitaxy 268, 291
Mott transition 252
Multi-quantum-well laser 411
Multiatomic steps 295
Multiband effective mass theory 65

Nanofabrication 276, 279, 315, 318, 415
Nanolithography 318
Narrow-gap semiconductors 360
Noise 156
Non-universal conductance fluctuations 54
Nonequilibrium transport 197, 411

One-dimensional channel 74
One-dimensional electron gas 34
One-dimensional electron waveguide 42
Optical absorption 397
Orbital magnetism 21

Peierls distortion 342
Periodic doping 57
Periodic orbit theory 138
Periodic potential 141
Persistent currents 397
Phase sensitivity 119
Photocurrent 17
Photoelectric effect 186
Photoluminescence 77, 291, 373
Photon-assisted transport 367
Point contacts 77, 241
Polaritons 287

Quantized conductance 42
Quantized semiconductor structures 6
Quantum capacitance 256
Quantum chaos 148
Quantum dots 1, 11, 17, 21, 82, 95, 98, 109, 119, 144, 148, 303, 373, 378, 404
Quantum effects 170
Quantum Hall effect 173, 180, 186, 189, 310
Quantum point contacts 161, 197
Quantum vortices 220
Quantum wells 42, 192, 202, 349, 360, 384, 387, 393
Quantum wires 24, 38, 42, 46, 50, 61, 65, 95, 249, 252, 346, 363, 390
Quasi-ballistic wires 152

Radiative lifetime 346
Raman scattering 397
Random telegraph noise 197
Random telegraph signal 74
Reactive ion beam etching 415
Reciprocal spaced mapping 11
Resonant level width 210
Resonant tunnelling 192, 202, 216

Scanning probe microscopy 282
Schottky in-plane gates 42
Screening length 238
Self-organized epitaxy 287
Self-organizing process 299
Semiconductors 367
SET 92
Shot noise 161, 241
Si 105
Si nanostructures 315
Si quantum wires 330, 336
Si/SiGe heterostructure 310
Single electrons 87, 105, 109
Single-electron charging effect 307
Single-electron transistors 112
Single-electron tunneling 82
Small Josephson junctions 232, 235
Small tunnel junctions 238, 307
SOI substrates 95
Spatial distribution 282
Spectroscopy 82
Spontaneous emission 407
Stability 87
STM 92, 271, 276, 282
Superconducting quantum point contact 224
Superconducting tunnel junctions 220
Superconductivity 245
Superconductor–insulator transition 102, 232
Superconductors 229
Superlattice 206
Surface roughness 333

TiN 323
Tomonaga–Luttinger liquid 249, 252
Traffic theory 87
Traps 74
Triple resonance 384
Tunnel junction 102
Tunnelling conductance 339
Tunnelling escape time 387

Universal conductance fluctuations 152, 229
Universality 333

Visualization 77

Wannier–Stark effect 206
Weak localization 148
Wigner distribution function 411

X-ray diffraction 11

Zener tunnelling 206